

User Manual

Version 1.0 - July 2012

Xsquare.



XTAccess Orchestrator



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Improvement Requests

Your comments will help us improve the quality of the user documentation. Do not hesitate to send improvement requests, or report any error or inaccuracy on this user manual by e-mail to doc@evs.tv.

Regional Contacts

The address and phone number of the EVS headquarters are usually mentioned in the **Help > About** menu in the user interface.

You will find the full list of addresses and phone numbers of local offices either at the end of this user manual (for manuals on hardware products) or on the EVS website on the following page: <http://www.evs.tv/contacts>

User Manuals on EVS Website

The latest version of the user manual, if any, and other user manuals on EVS products can be found on the EVS download center, on the following webpage: <http://www.evs.tv/downloadcenter>

Table of Contents

TABLE OF CONTENTS	III
1. XSQUARE INTRODUCTION	1
2. SOFTWARE INSTALLATION.....	2
3. XSECURE MANAGEMENT	5
3.1 Introduction	5
3.2 List of Codes	5
4. ASSOCIATING XTACCESS TO XSQUARE	6
4.1 Overview.....	6
4.2 How to Associate or Disassociate XTAccess	7
5. USER INTERFACE	8
5.1 Introduction	8
5.2 Monitoring	9
5.2.1 Overview.....	9
5.2.2 Queuing Management	10
5.3 Job Initiators	10
5.3.1 Targets.....	10
5.3.2 Scanfolders	11
5.3.3 ScanXML Instructions.....	14
5.4 Configuration	16
5.4.1 Orchestration	16
5.4.2 Job Templates	21
5.4.3 Encoders/Wrappers Profiles	22
5.4.4 Icons Manager	22
5.5 Administration	23
5.5.1 Users and Access.....	23

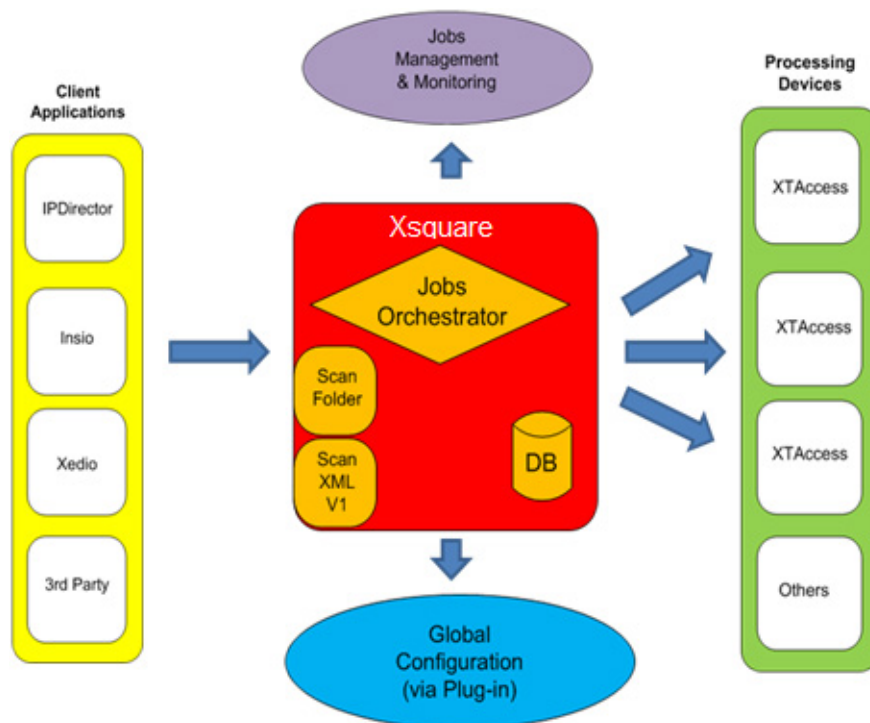
1. Xsquare Introduction

The goal of the Xsquare solution is to act as an orchestrator receiving job requests and dispatching them to the best engine (loadbalancing, JOB API, etc), which means an engine available and able to manage the requested job (transcoding, rewrap, etc).

The engines will first be limited to **XTAccess**. All the jobs for XTAccess will go through Xsquare, which will be the central point to control XTAccess. XTAccess will not be directly visible to the users any more.

The main advantages of this architecture are the following:

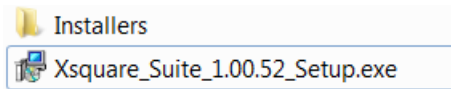
- One global Orchestrator for all the jobs → improvement of jobs load balancing, dispatching and management.
- One global configuration tool → simplification of the engines configuration as well as the targets configuration.
- One global monitoring tool → simplification of the monitoring of all the jobs.
- Additional modules (Scan Folder, Scan XML v1) can be added to Xsquare → modularity



The clients (IPD, 3rd party, Xedio, etc) who want to create a job (transfer of media from A to B) will have only one unique interface (GUI, API, configuration): **Xsquare**

2. Software Installation

The installation package is based on a suite of software with one installer and sub-installers in subfolders.



In the **Installers** folder you can retrieve all sub-installers (the EVS Software and Microsoft required software).

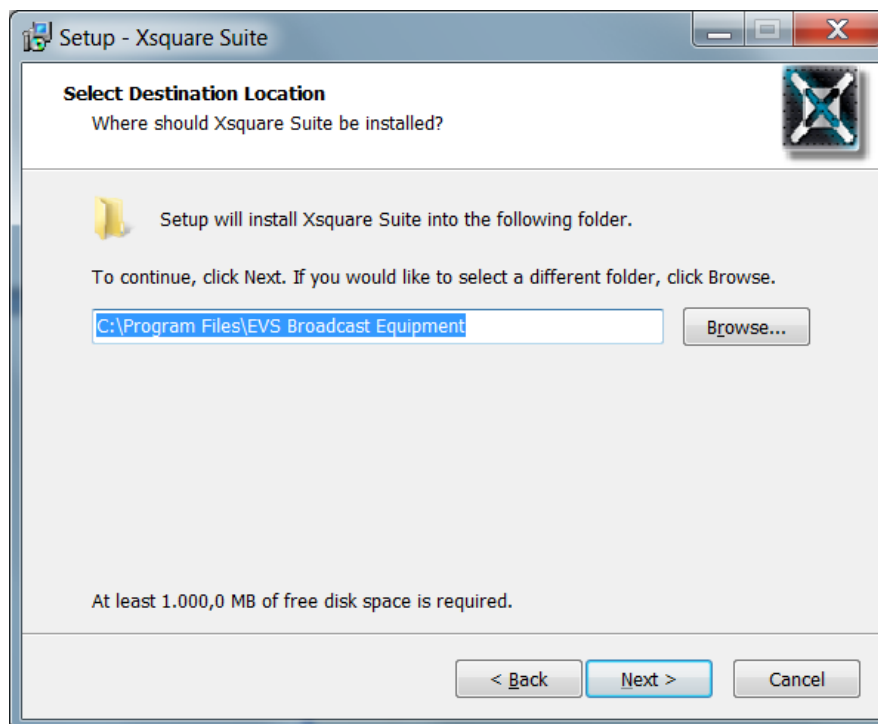
The Microsoft required software could be removed from the package in case of Update.

To install XTAccess, proceed as follows:

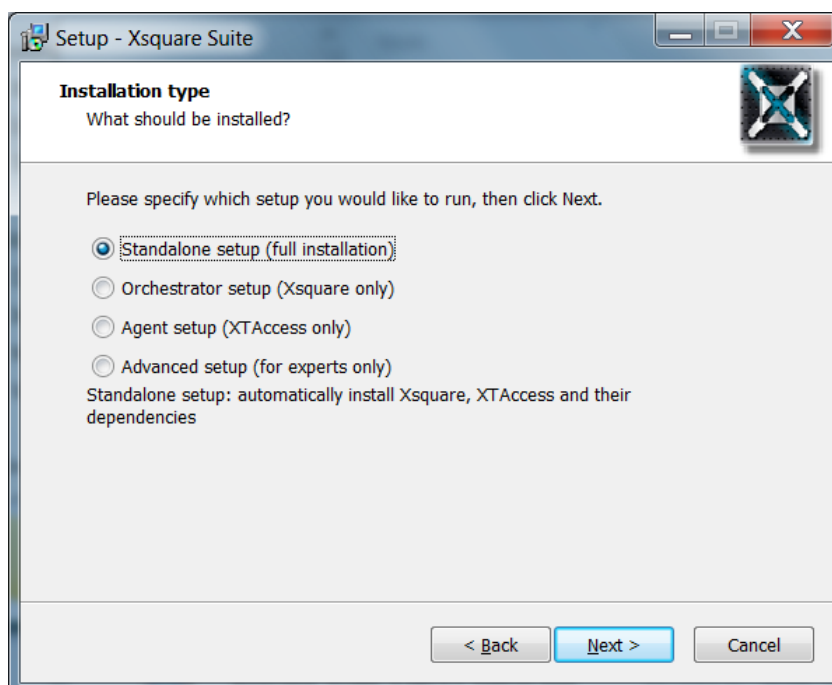
1. Copy the package in a temp directory (e.g. C:\Install Software\Xsquare\).
2. Run Xsquare Suite install shield and then follow the steps of the Setup wizard.



3. Press **NEXT**.

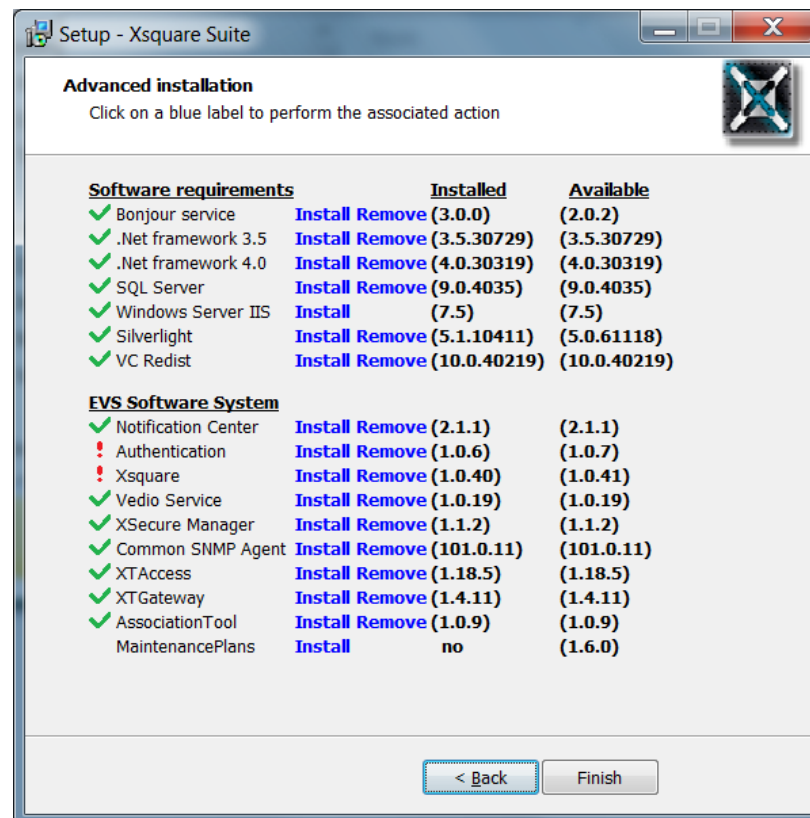


4. Select the destination directory to install the new software and then press **NEXT**.



5. You can select here the different Xsquare modes:

- **StandAlone setup:** The installer will install Xsquare, XTAccess and all the required software. The installer will also automatically associate XTAccess to Xsquare. This Installation mode will not ask other confirmations or questions.
- **Orchestrator setup:** The installer will install Xsquare and all the required software but not XTAccess. This Installation mode will not ask other confirmations or questions.
- **Agent setup:** The installer will install XTAccess and all the required software but not Xsquare. This Installation mode will not ask other confirmations or questions.
- **Advanced setup:** The installer will show you all the software installed on your computer and you will be able to select manually the software to install. This Installation mode will require for each installer other confirmations and questions. This mode must be used by EVS experts only.



Note that a shortcut of Xsquare has been automatically created on the desktop. Xsquare icon is the following:



3. XSecure Management

3.1 Introduction

To be able to manage more than 4 XTAccess with Xsquare and to be able to have the Xsquare user rights, it is necessary to have an Xsquare license.

XSecure uses hardware information from the device where XTAccess is running. This means that it is impossible to exchange licenses or codes between devices.

Please refer to the XSecure User's Manual to:

- Start XSecure Manager.
- Collect information about your device.
- Request a license key from the EVS support.
- Import new license keys.

3.2 List of Codes

130 – Xsquare

- **10 – Base Package:** Need to manage more than 4 XTAccess with Xsquare.

XSecure Manager version 1.01.02

Identification

System ID: ZRJT-VY5-W7F-228 Serial Number: 100400

Customer Information

Company: EVS
First Name: Olivier Last Name: Fettweis
Email Address: o.fett@mymail.tv
Phone Number:
Computer Description: BEMOF2

Warning

Note : this form must be filled in on the computer where the EVS application will be used

License List

Application	Module	Type	From	To	Code
60 - XTAccess	10 - Base Package	TEMP GLOBAL	see global	EBVSE-8h37P-hx#FM-wd	
60 - XTAccess	20 - Transcoding	TEMP GLOBAL	see global	OOU5M-BSVuP-VxZII-Jdtm	
130 - Xsquare	10 - Base Package	TEMP GLOBAL	see global	Brylv-kqV2w-VJyJM-CL0V	

Global Expiration Date: 24 OCT 2013

Operations

Request Select this option to generate a License Request File that must be sent by e-mail to your EVS support representative. Then you will receive a License Key File to activate your application.

Import Key File Select this option to Import the License Key File sent by EVS and activate the corresponding licenses.

Load Manually type the license key here, then click on "Load" to activate the corresponding license.

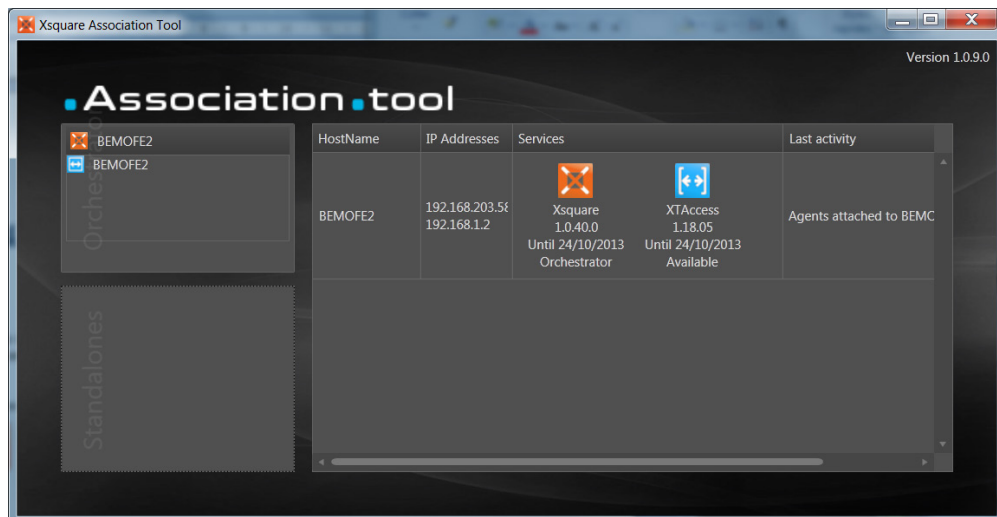
Quit

4. Associating XTAccess to Xsquare

4.1 Overview

After installing Xsquare and XTAccess, you will have to associate XTAccess to Xsquare.

Open the association tool on the Xsquare computer



You can see

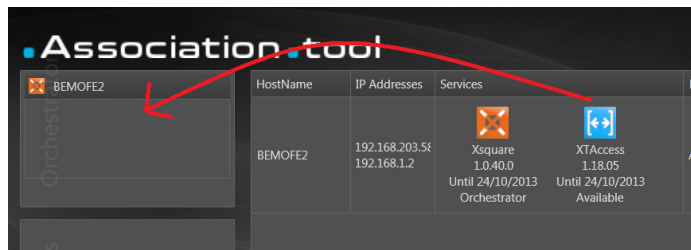
- On the right: all your computers which have XTAccess and/or Xsquare installed
- On the top left: the list of your Xsquare and the associated XTAccess.
- On the bottom left: the list of your Xsquare in Standalone mode.

4.2 How to Associate or Disassociate XTAccess

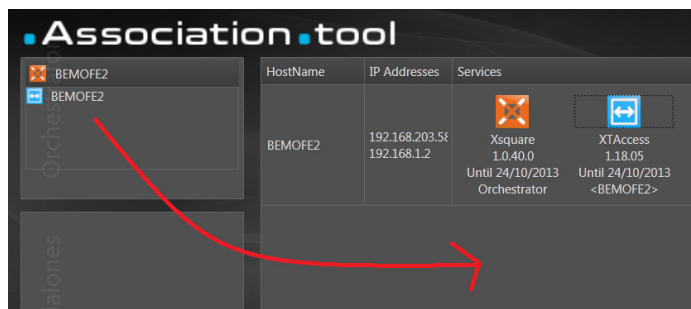
To associate/disassociate an XTAccess from an Xsquare, you simply have to drag and drop it from the left to the right or the right to the left. There is no **SAVE** button, the new association is done in “LIVE”.

Examples

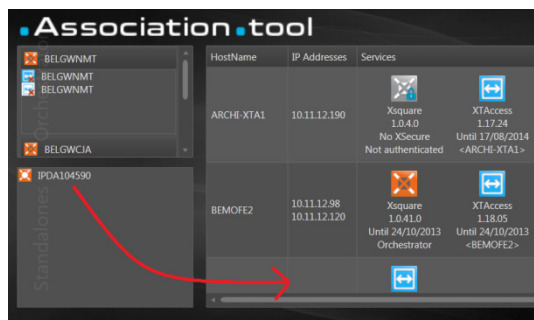
To associate an XTAccess to an Xsquare Orchestrator:



To dissociate an XTAccess from an Xsquare:



To dissociate an Xsquare Standalone:



Warning

It is impossible to move an XTAccess which processes jobs.

The new associated XTAccess will automatically be added in the Default cluster.

Light Orchestrator (without XSecure license) can manage maximum 4 XTAccess.

5. User Interface

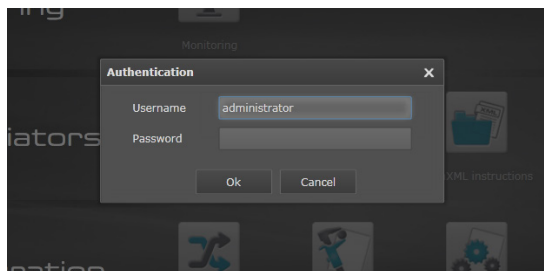
5.1 Introduction

The Xsquare interface is a web interface available from everywhere on the same network as Xsquare. This web interface is hosted on an EVS Proxy service on the port 9004 (not on windows IIS).



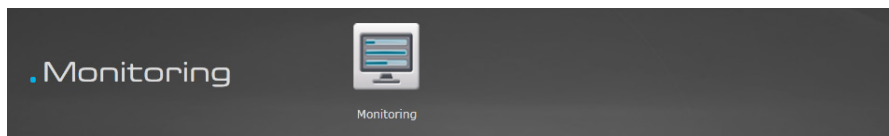
To be able to display the Xsquare web interface, the internet browser needs to have the Silverlight plug-in. If it is not the case the internet browser will automatically download it from the Xsquare server.

Depending on the user rights, you could have to enter your Xsquare login/password to access the web interface



5.2 Monitoring

5.2.1 Overview



The Monitoring of Xsquare will allow you to monitor but also manage all the Xsquare jobs:

Monitoring

In Progress Scheduled Failed Successful Cancelled

Clear Sort and Filters

ID	Received Date	Source Path	Source Name	Job Type	Destination	Status	Message	Frames/s	Mbytes/s	Cluster	XTA Nickname
99	21/06/2012 09:54:21	172.22.55.80 - 1: 2/	EVS Server to Avid TM	editor4:USA	Failed	Failed to connect XT.				default	BEMOF2
98	21/06/2012 09:54:21	C:\SrcFile_	SrcFile.mxf	File to Avid TM	editor4:USA	Failed	Failed to load EVSTMAuto.dfl.			default	BEMOF2
97*	21/06/2012 09:54:21	PL-USA	Render (Platten)	C:\DestFile_\EVS-PL-USA-111A (	75%			0 [1,62]		default	BEMOF2
96	21/06/2012 09:54:21	172.22.55.80	Transfer		Failed	Failed to connect XT.				default	BEMOF2
95*	21/06/2012 09:54:20	PL-USA	Render (Platten)	C:\DestFile_\EVS-PL-USA-111A (	65%			0 [1,4]		default	BEMOF2
94	21/06/2012 09:54:20	172.22.55.80	2/	Transfer		Failed	Failed to connect XT.			default	BEMOF2
93	21/06/2012 09:54:20	C:\SrcFile_	SrcFile.mxf	Transfer	C:\DestFile_\EVS-oli bis-111A (4 C:\DestFile_\2\EVS-oli bis-111A (4 C:\DestFile_\3\EVS-oli bis-111A (4 C:\DestFile_\delete.msx	Successful Successful Successful Successful	Destination successful Destination successful Destination successful Destination successful	73,5	6,05	default	BEMOF2
92	21/06/2012 09:54:20	C:\SrcFile_\seqa	Rita00000.tga	Transfer	ftp://*****@172.22.55.80:21	100%		0 [0,04]		default	BEMOF2
91	21/06/2012 09:54:20	C:\SrcFile_	ok.wav	Transfer	ftp://*****@172.22.55.80:21	Failed	File writer failed.	0 [0,21]		default	BEMOF2
90	21/06/2012 09:54:19	172.22.51.1	110A	Transfer	ftp://*****@172.22.55.80:21	Failed	Failed to decode frame	0,16	0,12	default	BEMOF2
88*	20/06/2012 10:57:43	172.22.55.80 - 1: 12/000A	Transfer	C:\DestFile_\EVS-IN1 USA-CamA	Cancelled	Destination cancelled.		24,95	13,3	default	BEMOF2
86*	20/06/2012 10:57:07	PL-USA	Render (Platten)	C:\DestFile_\EVS-PL-USA-111A (	Cancelled	Destination cancelled.		60,22		default	BEMOF2
83*	20/06/2012 10:55:18	C:\SrcFile_	SrcFile.mxf	Transfer	ftp://*****@172.22.55.80:21	Cancelled	Destination cancelled.	110,6	6,64	default	BEMOF2
81*	20/06/2012 10:55:09	172.22.55.80 - 1: 12/121A	Transfer	C:\DestFile_HighEVS-CULTURE-4 C:\DestFile_LowEVS-CULTURE-0	Successful Successful	Destination successful Destination successful		29,36	19,25	default	BEMOF2
79*	20/06/2012 10:55:01	172.22.55.80 - 1: 12/121A	Transfer	C:\DestFile_HighEVS-CULTURE-4 C:\DestFile_LowEVS-CULTURE-0	Successful Successful	Destination successful Destination successful		29,73	19,49	default	BEMOF2

Page 1/4 Jobs per page: 20 Jobs matching current filter: 71 Auto refresh /

Cancel Job(s) Retry Job(s) Queue Management Show Advanced

The available features on the Monitoring window are the following:

- Filter on all column information, by cluster and status.
- Sort on each column.
- Cancel on scheduled or running jobs.
- Retry on cancelled or failed jobs.



Note

You can retrieve the history of one job if you click on the little arrow

88*	20/06/2012 10:57:43	172.22.55.80 - 1: 12/000A	Transfer	C:\DestFile_\EVS-IN1 USA-CamA	Cancelled	Destination cancelled.
88	20/06/2012 10:57:43	172.22.55.80 - 1: 12/000A	Transfer	C:\DestFile_\EVS-IN1 USA-CamA	Cancelled	Destination cancelled.
89	20/06/2012 10:58:03		Cancel		Successful	Cancel sent

5.2.2 Queuing Management

In the Monitoring tool, you can re-order the queue of scheduled jobs inside Xsquare.

By default the order of the job execution is “First In First Out” by cluster. But it is possible to change the order in the queue and use the **Move to the Top** button to move one specific job to the top of the Xsquare scheduled list.

The screenshot shows the 'Monitoring • Queue management' window. On the left, there's a sidebar with 'IngestFromEVSServer' and 'Default (default)' selected. The main area displays a table of scheduled jobs. Job ID 93 is highlighted, and a red arrow points to it. At the bottom right, the 'Move Job To Top' button is highlighted with a red box.

ID	Received Date	Source Path	Source Name	Job Type	Destination	Status	Frames/s
90	21/06/2012 09:54:19	172.22.51.1		Transfer		Scheduled	
91	21/06/2012 09:54:20			Transfer		Scheduled	
92	21/06/2012 09:54:20			Transfer		Scheduled	
93	21/06/2012 09:54:20	C:_SrcFile_	SrcFile.mxf	Transfer		Scheduled	
94	21/06/2012 09:54:20	172.22.55.80		Transfer		Scheduled	
95	21/06/2012 09:54:20			Render (Flatten)		Scheduled	
96	21/06/2012 09:54:21	172.22.55.80		Transfer		Scheduled	
97	21/06/2012 09:54:21			Render (Flatten)		Scheduled	
98	21/06/2012 09:54:21	C:_SrcFile_	SrcFile.mxf	File to Avid TM		Scheduled	
99	21/06/2012 09:54:21	172.22.55.80 - 1.1		EVS Server to Avid TM		Scheduled	
100	21/06/2012 09:54:21	172.22.55.80		Grab		Scheduled	
101	21/06/2012 09:54:21	C:_SrcFile_	SrcFile.mxf	Grab		Scheduled	



Note

As Xsquare manages job queue by cluster, the queuing management is also done by cluster.

5.3 Job Initiators

The screenshot shows the 'Job Initiators' section with three icons: 'Targets', 'Scanfolders', and 'ScanXML instructions'.

5.3.1 Targets

Overview

You can create here targets which will be available for the JOB V2 Xsquare API.

The screenshot shows the 'Job Initiators • Targets' window. It contains a table with the following data:

Target Name	Template	Destination Name	Destination
MyTargetName	To EVSMXF file	To EVS MXF file (no transcoding)	\\MyServer\\MyFolder

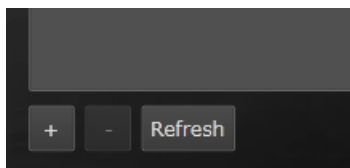
Target Definition

For each target you will have to define:

- Name: name that could be displayed on the client interface.
- Template: template with all the job parameters.
- Icon: icon which represents the target.
- Description(s): description of each destination.
- Destination(s): path or IP address.

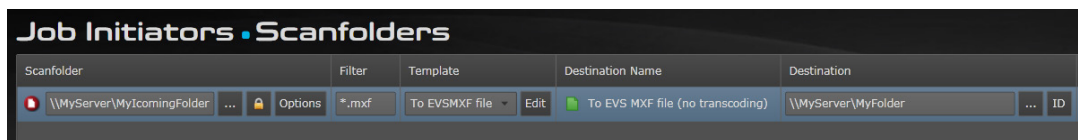
How to Add/Remove a Target

To add/remove a target you just have to click on the + or – button on the bottom of the window:



5.3.2 Scanfolders

Scanfolder Definition



You can create here Scanfolders. These are actually watch folders which will send jobs to Xsquare each time there is a new media in it.

For each scanfolder, you will have to define:

- Source folder: UNC Path where the Xsquare scanfolder will wait for media files.



Warning

You cannot create two scanfolders in the same folder.

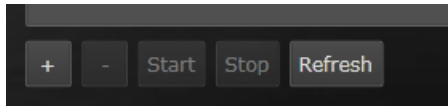
The scanfolder source must be a shared folder on the network (UNC Path) and the scanfolder service must have Read/Write access to it.

- Filter: filter to scan only some specific files (based on the extension).
- Template: template with all the job parameters.
- Icon: icon which represents the target.
- Description(s): short description for each destination.
- Destination(s): path or IP address.

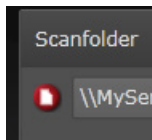
There are three kinds of scanfolders:

- Scanfolder for Files: in this mode the scanfolder service will scan video files.
- Scanfolder for Graphical Sequence: in this mode the scanfolder service will scan folders which must contain graphical sequences.
- Scanfolder for Audio Source: In this mode the scanfolder service will scan audio files.

To add/remove a scanfolder, you simply have to click on the + or – button on the bottom of the window.

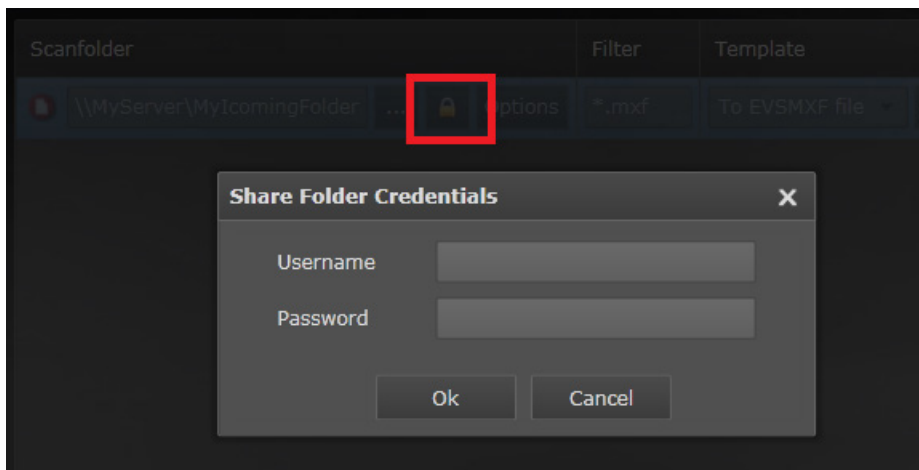


To stop/start a scanfolder: you can click on the small icon next to the scanfolder:



Credential

The little lock allows you to add the Windows Username/Password to access the watch folder:

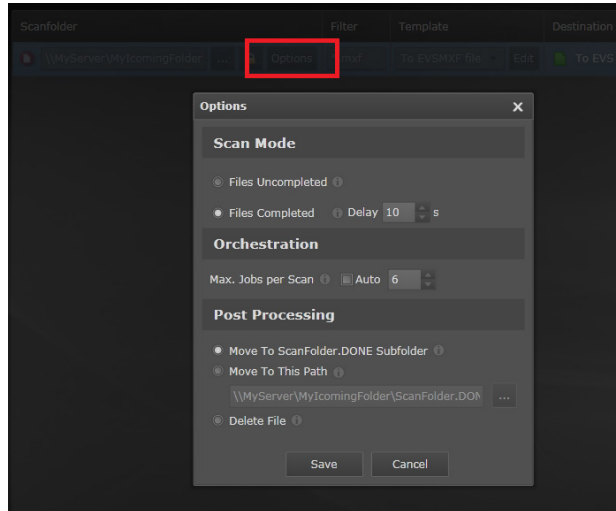


Warning

You cannot access different computer UNC paths from the same computer with different windows usernames. The Xsquare computer can access another computer with only one username.

Scanfolder Options

You can define here some options for each scanfolder:



Scan Mode

- Uncompleted files + delay (sec): the Scanfolder service will send the job to Xsquare as soon as it sees the new file or after x seconds, depending on the delay configuration. In this case, if the source file is not growing compatible, the job will fail.
- Completed files + delay (sec): The Scanfolder service will wait to have Write access on the file and will also wait x seconds after the last file update before sending the job to Xsquare.

Orchestration

- Max. Jobs per scan: It is the maximum number of files that the Scanfolder service can process at the same time.



Note

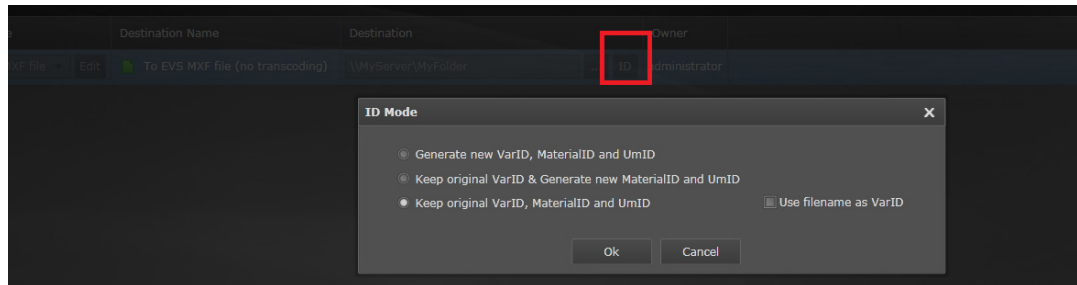
If you want to be sure that the local XTAccess of your source watch folder will execute the job, you will have to create a specific cluster for this folder (see below).

Post- Processing of the Source(s)

- Move to ScanFolder.DONE subfolder (default value): the Scanfolder service will send a job to Xsquare asking XTAccess to move the source file to a subfolder called "ScanFolder.Done" if the job is successful or "ScanFolder.Failed" if the job is unsuccessful.
- Move to specific folder: the Scanfolder service will send a job to Xsquare asking XTAccess to move the source file in the defined folder after the processing of the source file.
- Delete source file: the Scan Folder service will delete the source file after its processing.

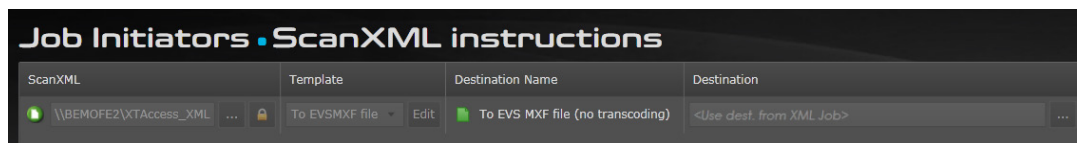
Scanfolder ID

You can define here how Xsquare must manage the media IDs (VarID, MaterialID, UmID) created by the scanfolder



5.3.3 ScanXML Instructions

ScanXML Definition



You can create here ScanXML for previous job xml V1. Xsquare will in fact use the information of the job V1 + the information defined in the template and then create a full job.

For each ScanXML you will have to define:

- The source folder: UNC Path where the Xsquare ScanXML will wait for XML job V1 (from IPD for example).



Warning

You cannot create two scanXMLs in the same folder.

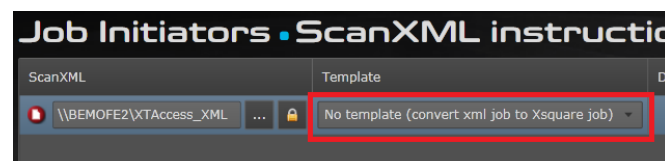
The scanXML source must be a shared folder on the network (UNC Path) and the scanXML service must have Read/Write access on it.

- Template: template with all the job parameters.



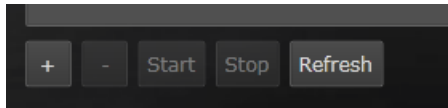
Note

If you select No template: Xsquare will simply translate the job V1 to job V2.

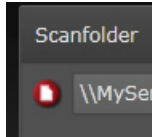


- Icon: icon which represents the target.
- Description(s): short description for each destination
- Destination(s): path or IP address.

To add/remove a ScanXML, you simply have to click on the + or – button on the bottom of the window:

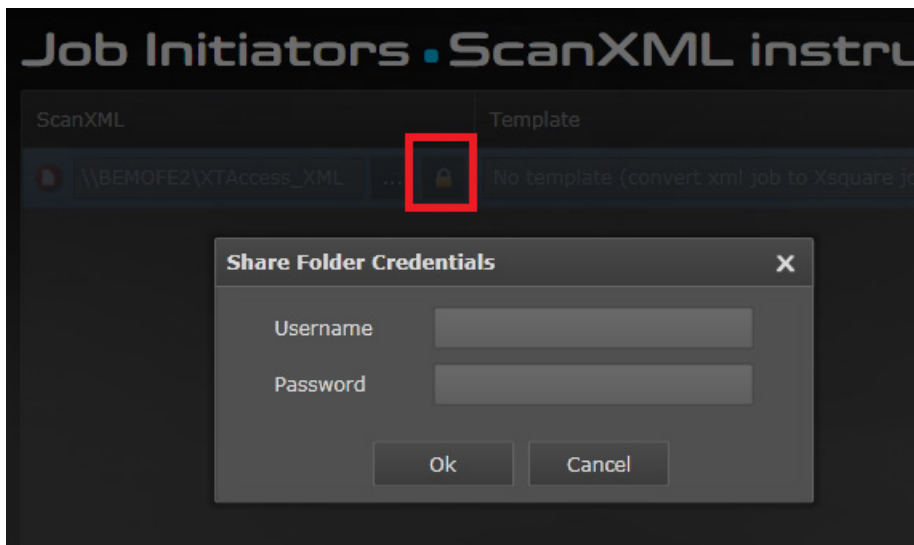


To stop/start a ScanXML, you can click on the small icon next to the ScanXML:



Credential

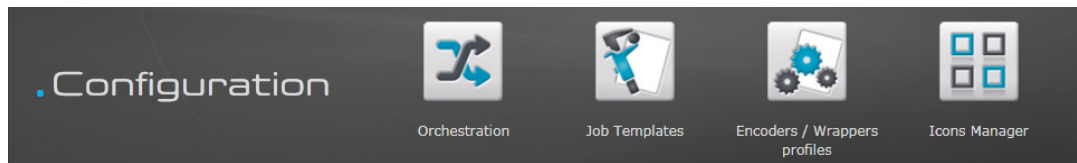
The little lock allows you to add the Windows Username/Password to access the ScanXML watch folder:



Warning

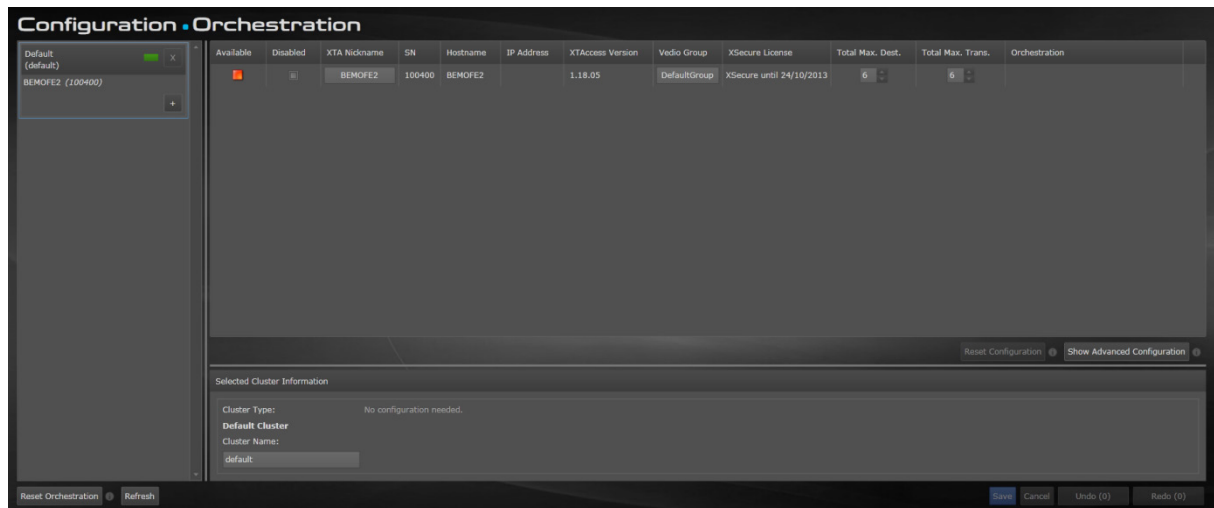
You cannot access different computer UNC paths from the same computer with different windows usernames. The Xsquare computer can access another computer with only one username.

5.4 Configuration



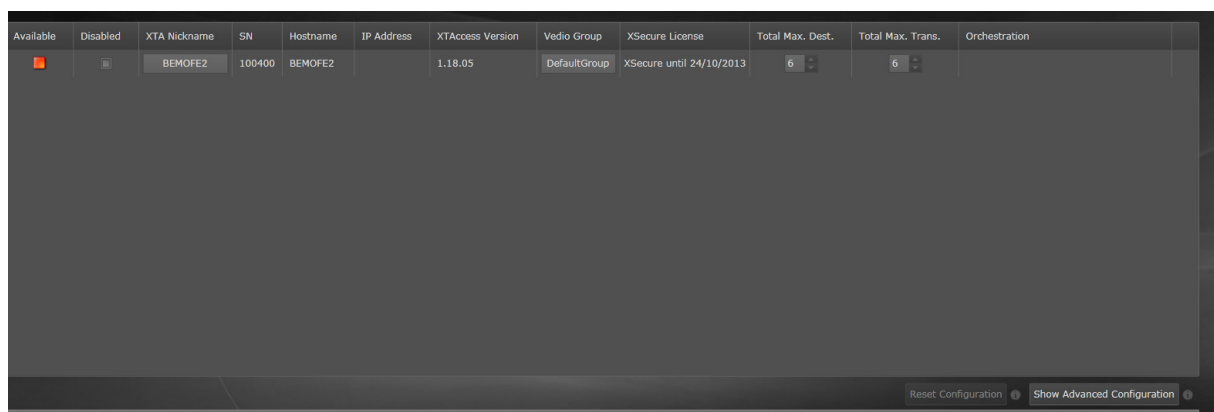
5.4.1 Orchestration

You can configure here your XTAcess and create clusters:



XTAcess Configuration

You can see in this list all the XTAcess associated to your Xsquare:



Here is a list of information and configurations available for each XTAcess:

Information

- XTAcess Nickname

- XTAcess Group for Vedio
- XTAcess SN (not editable)
- XTAcess IP (not editable)
- XSecure validity date (not editable)

Configuration

- Total max dest: maximum number of destinations that one XTAcess can handle (transcoding jobs included).
- Total max trans: maximum number of destinations that one XTAcess can transcode.



Note

One job can contain several destinations.

- Nbr EDL Sub Jobs: maximum number of child jobs that XTAcess can do simultaneously during a backup EDL + Clips.
- FileWriter NoBuffering: option to increase the performance when XTAcess writes on a non Windows storage.
- FileReader NoBuffering: option to increase the performance when XTAcess reads a non Windows storage.
- QT Ref optimisation: option which forces all QTRef files to be seen as growing files by XTAcess.

Disabling an XTAcess

On this interface you can also disable one XTAcess:

Available	Disabled	XTA Nickname	SN
<input checked="" type="checkbox"/>	<input type="checkbox"/>	BEMOFE2	100400



Note

XTGateway will be configured by default to be able to do four operations of playlist rendering at the same time. It will be impossible to change this configuration from Xsquare. The modification of the XTGateway configuration must be done manually.

You will still have to install and configure manually the EVS AVID Tools for the integration with the Avid Transfer Manager. Xsquare will not manage the AVID TMclient.ini file.

The following parameters will not be available on the Xsquare Configuration interface. So, if necessary, these parameters will have to be configured manually on each XTAcess (registry keys).

- Max Log size In MB (Default 2)
- IP Retry (Default 12)

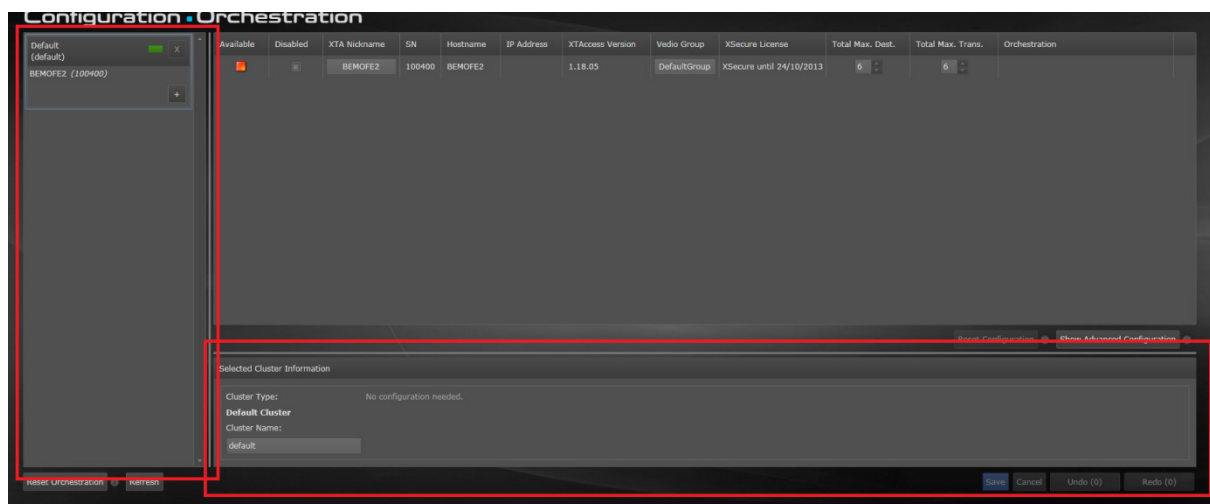
- *IP Retry timeout (Default 5000)*
- *Enable Retry (Default 1)*
- *MinFieldsToWriteBeforeReflnCEDB (Default 1000)*
- *EDL File extension (Default .edl)*

Cluster Configuration

Introduction

The Orchestrator (Xsquare) will always send the jobs to the most available XTAccess.

But it is possible to create a group of XTAccess called “Cluster”. These clusters must be based on the network topology or on “LIVE” aspect (backup of train real time). The clusters will actually force the orchestration of some jobs to a specific group of XTAccess.

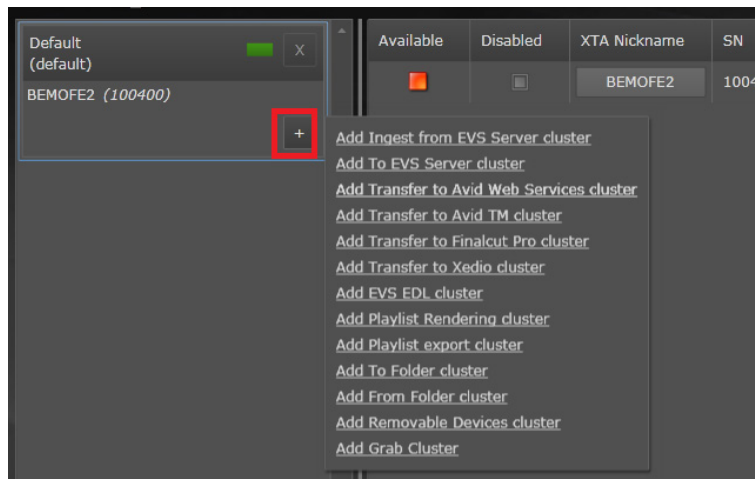


The goals for creating clusters could be:

- To isolate specific important jobs (backup of train) to some specific XTAccess (LIVE aspect).
- To send jobs to some specific XTAccess which are the only XTaccess that can reach the destination (network topology aspect).

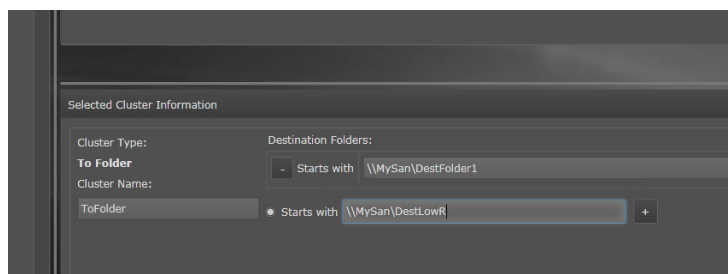
Adding a Cluster

To add a new cluster: you have to click on the + button and then select the cluster that you want to create:



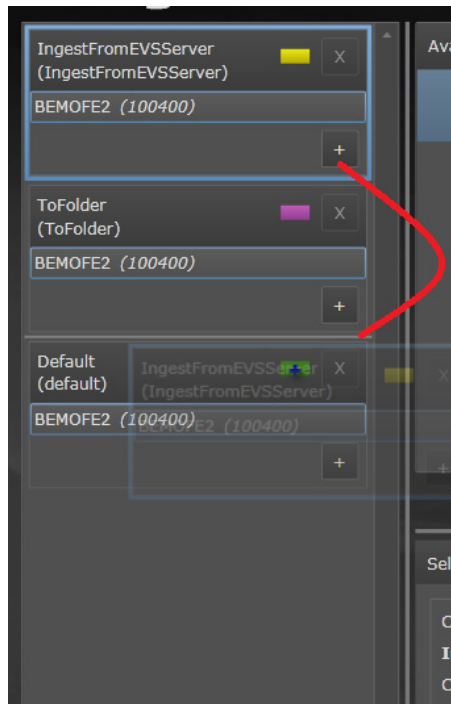
Depending on the cluster, some configurations are available.

For example: for the cluster “To Folder”, you can configure the folder.



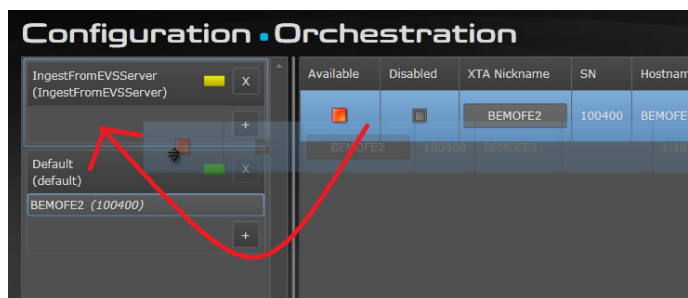
Changing the Cluster Position

It is also possible to move the Cluster order by dragging and dropping it in the list:

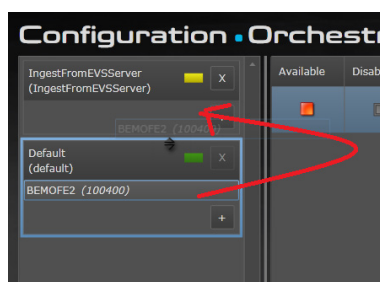


Adding an XTAccess or a Cluster to a Cluster

After creating a cluster: you can add several XTAccess in it by drag and drop from the left to the right:



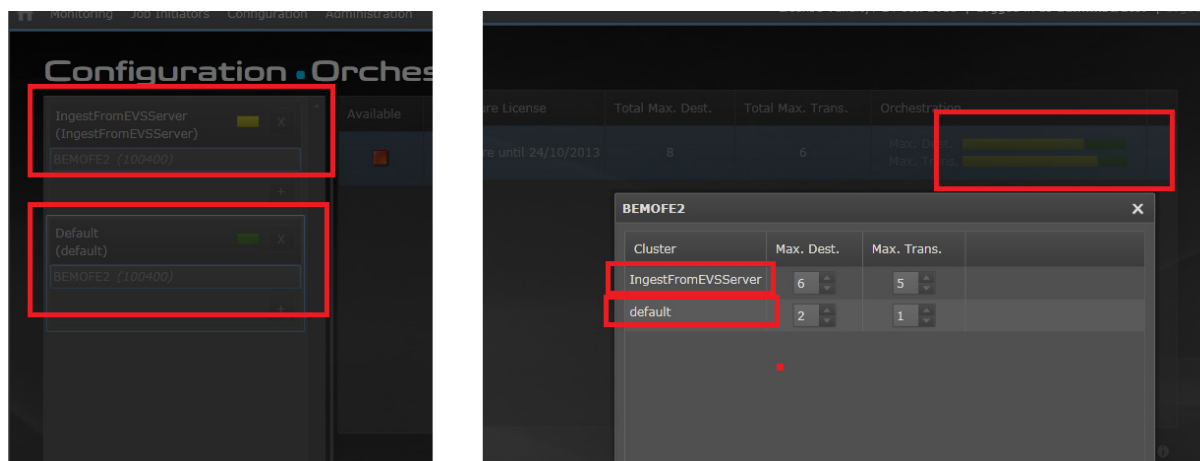
Or from one cluster to another one:



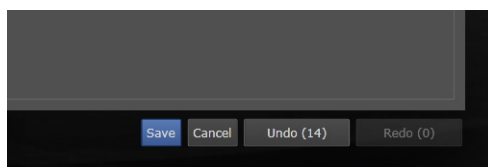
Note

One cluster cannot be empty

If one XTAccess is in two clusters: you will be able to define the “max dest” and “max trans” by cluster:



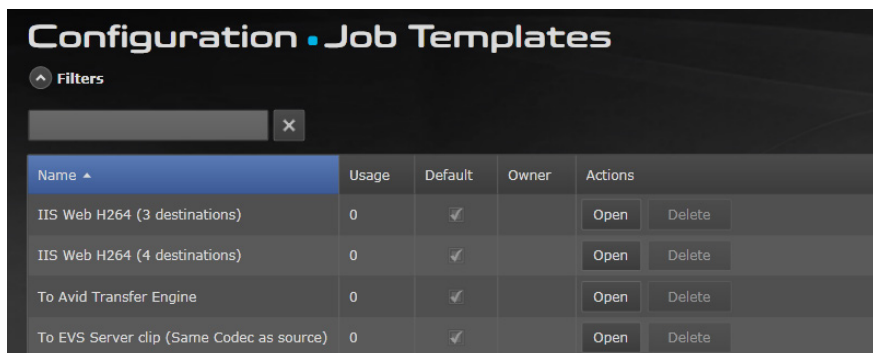
When you are done configuring, you can decide to save, cancel, undo or redo it.



The configuration can be done during jobs processing.

5.4.2 Job Templates

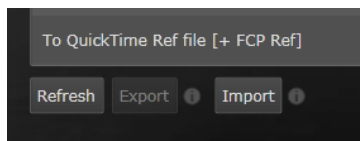
You can manage your list of templates in this window.



It is also possible to import/export templates.

**Note**

The template name and GUID must be unique.

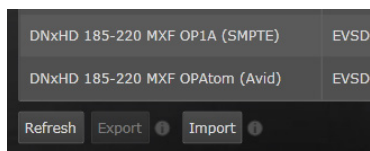


5.4.3 Encoders/Wrappers Profiles

You can manage here your list of encoders/wrappers profiles.



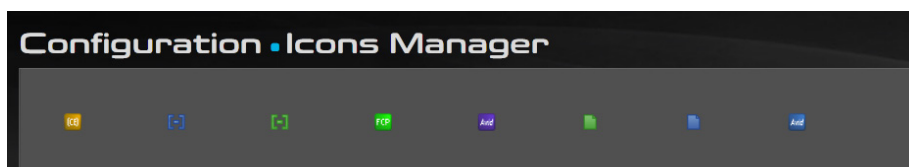
It is also possible to import/export encoders/wrappers profiles

**Note**

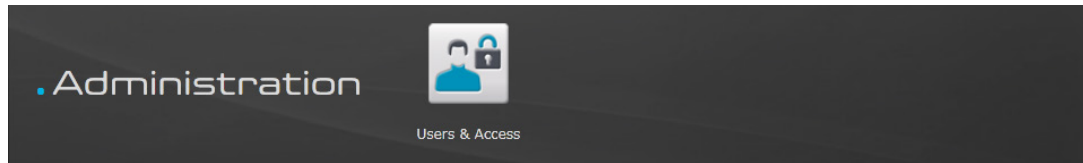
It is also possible to import encoder/wrapper profile from XTAccess 1.17

5.4.4 Icons Manager

You can manage here your Xsquare icons. At the moment, they are only used to illustrate the destinations.

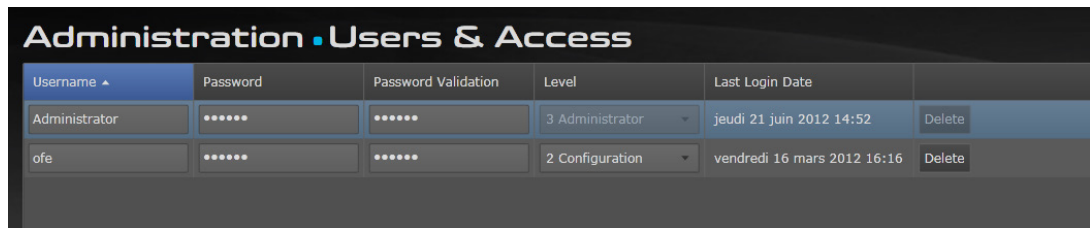


5.5 Administration



5.5.1 Users and Access

You can here manage the Xsquare users which will be used to access the web interface or to send job SOAP V2

A screenshot of the 'Administration . Users & Access' table. The table has columns for Username, Password, Password Validation, Level, Last Login Date, and a Delete button.

Username	Password	Password Validation	Level	Last Login Date	
Administrator	*****	*****	3 Administrator	jeudi 21 juin 2012 14:52	Delete
ofe	*****	*****	2 Configuration	vendredi 16 mars 2012 16:16	Delete



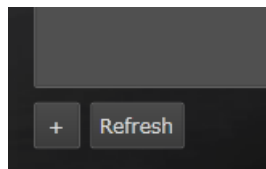
Warning

If you change the password of one user: do not forget to also change it in the client application which sends jobs V2 to Xsquare

Here is the list of the different user rights:

- Level 3 (administrator): can access everything and create users.
- Level 2 (deployment and configuration): not released yet.
- Level 1 (monitoring): can only access the monitoring window of Xsquare.

Press the + button to add a User



Note

This window is only available if your Xsquare has a Xsecure license.

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